DOCUMENT RESUME

ED 132 669 EA 008 954

AUTHOR Lorenzen, Gary L.; Braskamp, Larry A.
TITLE Comparative Influences of Political, Cost/Benefit, and Statistical Evaluation Information on Administrative Decision Making.
PUB DATE Sep 76
NOTE 14p.; Paper presented at the Annual Meeting of the American Psychological Association (84th, Washington, D.C., September 3-7, 1976)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Administrative Personnel; Administrative Problems; Administrator Attitudes; *Cost Effectiveness; *Decision Making; *Evaluation Criteria; Political Issues; Program Evaluation; *Simulation; Statistical Data; Tables (Data)

ABSTRACT

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# Comparative Influences of Political, Cost/Benefit, and Statistical Evaluation Information on Administrative Decision Making

Gary L. Lorenzen, Ph.D.

Selection Research, Inc.

Lincoln, Nebraska

Larry A. Braskamp, Ph.D.

University of Illinois - Urbana

EA 008 954

## Abstract

The influence of three types of evaluation information was studied in simulated decision-making situations within a community mental health center setting. Administrators reviewed decision problems and were then presented political, cost/benefit and statistical information one at a time. After each presentation, subjects rated the importance they placed upon the different types of information and then indicated their decisions regarding the problem. The results indicated that only cost/benefit data significantly influenced administrators' decisions. The effects of various types of information were not dependent upon the type of decision situation. Length of time in administrative positions did not significantly correlate with the level of importance placed on political, cost/benefit or statistical data. The findings indicated that if program evaluators are to have an impact upon decision making, they must provide better cost/benefit data and face up to a much tougher pay-off based evaluation strategy.

## Comparative Influences of Political, Cost/Benefit and Statistical Evaluation Information on Administrative Decision Making

A major problem for an evaluator is to be able to predict what types of information will be needed and most useful to decision makers. While program evaluators would sometimes prefer to be final judges (Scriven, 1967), they often function as advisors rather than decision makers within an organization (Weiss, 1973). An evaluator has the responsibility to present information to decision makers in a form they can use and understand. When evaluation information does not satisfy a decision maker's needs, the information will have little impact upon the decision-making process.

The purpose of this study was to investigate the influence of different types of evaluation information on administrative decision making in community mental health centers. Two decision situations, a direct service problem and an indirect service problem, were simulated in a group setting with paper and pencil materials.

The primary research hypothesis was that political, cost/benefit and statistical evaluation information has significantly different levels of influence upon administrative decisions. In addition, it was speculated that decision making based upon different types of information is dependent upon the type of decision situation and the length of time administrators have been in mental health program administrative positions.

## Method

Subjects. Twelve mental health center administrators were randomly assigned to one of two decision-making situations. The subjects were asked to assume the role of the mental health center director in each decision situation. A limited amount of detail about the decision problem was initially presented so that subjects would be compelled at first to rely upon their own personal experiences and impressions and then the additional evaluation information as it was presented.

Decision Situations. A parallel forms format was used in the two decision situations. In each simulation the situation and background information was presented, followed by each type of additional information one at a time.

In the direct services situation the mental health center director must decide how many hospital beds will be needed during the coming year for mental health services. It must also be decided whether or not additional beds should be reserved for alcohol detoxification services. The center direct renegotiates a contract on a yearly basis with the local hospital for in-patient mental health services. A flat annual fee for administrative overhead is charged by the hospital according to the number of beds to be reserved and available.

The indirect services decision required the center director to decide how many dollars to budget during the coming year for mental health education and consultation services. Since a federal staffing grant drops to a minimum 30 percent funding level next year, the director will need to ask county commissioners for more money to continue these indirect service programs. The center has had a full-time mental health educator the past four years. The educator is getting married next month and plans to resign. Three other full-time staff have been

working half of their time in community consultation with schools, church groups, and law enforcement agencies. The center director must decide if he should decrease the 42,800 dollar consultation and education budget or expand and possibly reorganize the consultation and education program.

Treatment Information. Three types of information were presented to the administrators for each decision situation. The same types of data were prepared for both decision-making situations, but the content of the two parallel forms of information was different. The format, persuasive composition, and amount of information were the same for both decision situations.

Political information included the opinions of internal mental health center staff, the center's external advisory council of lay person representatives, and the existing leanings of local county commissioners who comprise the center's governing board. The power structure at both the state and federal levels was discussed. It was an election year, and the political considerations and consequences of the decision options were reviewed.

Cost/Benefit information was based upon the Program Planning and Budgeting System (PPBS). Last year's planned program objectives, program budgets, and program outcomes were presented. The staff were moderately successful in attaining program objectives, but actual costs exceeded projected unit benefits for last year. While the federal staff grant support is declining, local funding have always previously been approved to pick up the annual reductions in federal funds.

Statistical data was presented on the catchment area residents being served. The population is predominantly rural with only two large urban centers. A significant portion of the population is non-white. The actual utilization of the respective services was also summarized. An inference was made regarding the

percentage of people in the catchment area who could benefit from services, i.e. the demand or need. The existing level of utilization (viz. met demand) was then subtracted from the total inferred demand, and the difference was the projected unmet need.

Experimental procedures. Twelve booklets of simulation material were randomly distributed at a group meeting of community mental health center administrators. Six of the booklets were simulations of the direct services situation, and six were simulations of the indirect services situation. Each booklet included a general subject background information sheet, the respective decision situation, four decision-maker opinionnaires and the three sets of evaluation information. Subjects were instructed to assume the role of the community mental health center director, read through the booklet and respond to the decision-making opinionnaires as they were presented.

Experimental design. The order of presentation for the three sets of evaluation information was counterbalanced within each experimental group. The decision maker opinionnaire was presented immediately following the simulation situation and again after each type of additional evaluation information was presented. The overall design was, thus, a 4 x 2 factorial with repeated measures in both treatment groups.

The decision-maker opinionnaire. The assessment instrument was a 10 item Likert Scale which measured administrators' opinions regarding the importance and usefulness of political, cost/benefit and statistical data. In addition to the 10 Likert items, two questions were posed regarding what the administrator would decide given the existing amount of information.

The Likert Scale response items were quantified on a 10 to 70 scale with 40 being the scale midpoint. Individual items were coded so that the greater the level of importance placed upon the evaluation information, the larger the subject's numeric score.

## Results

Influence of information. The effects of the type of information presented and the type of decision situation confronted are summarized in Table 1. The treatment effect of type of evaluation information was statistically significant ($F_{3,30} = 5.38$; $p < .001$) with no interaction effects between type of decision and type of information presented.

Table 1

Decision-Maker Opinionnaire Differences With Repeated Measures on Type of Information

| Source | SS | df | MS | F |
|---|---|---|---|---|
| Between subjects | | | | |
| Type of Decision (B) | 6533.33 | 1 | 6533.33 | 1.30 |
| Subjects within Groups S(B) | 50108.25 | 10 | 5010.82 | |
| Within subjects | | | | |
| Type of Information (A) | 29541.66 | 3 | 9847.22 | 5.38* |
| AB | 5049.97 | 3 | 1683.32 | .92 |
| AS (B) | 54956.59 | 30 | 1831.89 | |
| Total | 146189.80 | 47 | | |

*$p < .001$

In order to identify which type of evaluation information significantly influenced administrators' decisions, the Tukey T-method was used to make pairwise comparisons between the pretest control and post-treatment assessments.

Results of the post hoc analysis are shown in Table 2.

Table 2

Comparisons Between Means of Different Types of Evaluation Information

| | | Difference in Group Means | | | |
|---|---|---|---|---|---|
| Group | $\bar{X}$ | Control | Political | Cost/Benefit | Statistical |
| Control | 476.67 | -- | 36.66 | 69.16* | 25.83 |
| Political | | | -- | 32.50 | 10.83 |
| Cost/Benefit | | | | -- | 43.33 |
| Statistical | | | | | -- |

*$p < .05$

The difference in mean decision-maker opinionnaire scores was statistically significant for the cost/benefit evaluation information versus no evaluation information assessments. No other pairwise comparisons were significant at the .05 level.

The number of months of administrative experience for each subject was correlated with the initial level of importance, i.e. control assessment, the subject placed upon political, cost/benefit, and statistical information. The findings from the three respective Pearson product-moment correlations are presented in Table 3.

Table 3

Relationship Between Administrative Experience and Importance of Types of Information[a]

| Type Information | $r_{XY}$ |
|---|---|
| Political | -.17 |
| Cost/Benefit | .12 |
| Statistical | -.12 |

Note. Administrative experience was measured in months.

[a] $n$ = 12 for each type of information.

Review of Table 3 indicates no significant relationship between administrative experience and importance initially placed upon different types of data. In fact, a negative correlation was found for political and statistical data. That is, the greater an administrator's experience, the less importance they placed upon political and statistical information.

## Discussion

The results support the contention that administrators respond differently to various types of evaluation information. More specifically, only cost/benefit data was significantly influential in shaping administrative decisions for the two simulated decision situations.

The overall findings did not indicate a relationship necessarily exists between type of decision to be made or length of administrative experience and the importance placed on various types of evaluation data. The opinionnaire data revealed, however,

that cost/benefit information is more important than other types of data to administrators irregardless of their professional administrative experiences. This is especially meaningful given the fact three fourths of the respondents (n = 9) had at least three years of clinical as well as administrative mental health experience.

This study supports remarks by Scriven (Salasin, 1974) that evaluators must collect better cost/benefit data and face up to a much tougher kind of pay-off based evaluation strategy. Furthermore, the study shows that administrators believe cost/benefit data are more important in decision making than either statistical or political information.

Administrators are not certain about the role of an evaluator. They do not agree on the competencies needed by evaluators to meet their needs. Evaluators must attend to what administrators need and feel is important information. The results and usefulness of the information evaluators provide will determine if evaluation is to play a significant role in the decision-making process.

Current evaluation models often stress inappropriate strategies for evaluators. Measurement-based strategies need to be replaced by policy-making models. At the same time evaluators have not been the final judges in decision making. Expert opinion cannot overrule economic constraints and political demands. Evaluators must be trained to recognize these limitations and collect information which reflects and hopefully will satisfy economic questions.

Evaluators may view themselves as information providers (Stufflebeam et. al., 1971) or as individuals who can facilitate judgments about the social and economic worth of human service programs (Scriven, 1972; Stake, 1972; Weiss, 1973). But

the overriding conclusion from this study is that evaluators may have little or no impact upon decision making unless they can provide information to decision makers which decision makers believe is important and useful.

Evaluators must continually ask themselves: Is the information I am collecting not only important to me, but also important for the person who will make final decisions?

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